

## CLAIMS

- 1     1.     A telecommunication switch comprising  
2             a passive section including  
3                 a housing having a bottom wall, a pair of upstanding side walls, an up-  
4     standing rear wall and an open front,  
5                 a multiplicity of signal ports mounted in said rear wall,  
6                 an I/O circuit board supported on the bottom wall, said I/O board having a  
7     front edge,  
8                 a first electrical connector mounted to said I/O board adjacent to the front  
9     edge thereof, said first connector having a multiplicity of contacts, said I/O board carry-  
10    ing only non-active components of the switch and defining a multiplicity of signal spans  
11    between said ports and the contacts of said first connector, and  
12                 a tray slidably received in said housing through the open front thereof, said tray  
13    including  
14                 a pan having a bottom wall, a pair of upstanding side walls and an up-  
15    standing front wall,  
16                 a printed circuit motherboard supported on the bottom wall of the pan,  
17    said motherboard having a rear edge and carrying all of the active components of the  
18    switch, and  
19                 a second connector mounted to the motherboard adjacent to the rear edge  
20    thereof, said second connector having a multiplicity of contacts that are mateable with the  
21    contacts of the first connector, said motherboard defining signal paths between the active  
22    components thereon and the contacts of the second connector,  
23                 said first and second connectors being arranged and adapted so that when  
24    said tray is slid into said housing to a home position, the corresponding contacts of the  
25    first and second connectors are coupled together so as to establish all of the electrical  
26    connections between said ports and said active components that are needed for normal  
27    operation of the switch.

- 1     2.     The switch defined in claim 1 wherein

2 the passive section also includes a power port mounted in the rear wall of said  
3 housing and a first power connector supported by the housing and connected electrically  
4 to the power port, and

5 the tray also includes a power supply supported by the pan, said power supply  
6 having an output connected electrically to the motherboard and an input, and a second  
7 power connector supported by the pan and connected electrically to the power supply in-  
8 put, said first and second power connectors being arranged and adapted so that when the  
9 tray is slid into the housing to said home position, said first and second power connectors  
10 connect the power port to the power supply.

1 3. The switch defined in claim 1 wherein the front wall of the tray is dimensioned so  
2 that when the tray is in said home position, said front wall closes the front opening into  
3 said housing.

1 4. The switch defined in claim 1 wherein the tray also includes a PC board carrying  
2 control components accessible through openings in the front wall of said pan.

1 5. The switch defined in claim 1 and further including interfitting portions on the  
2 side walls of said housing and said tray for guiding the tray to and from said home posi-  
3 tion.

1 6. The switch defined in claim 4 and further including means for releasably fasten-  
2 ing the tray in said home positioning in the housing.

1 7. The switch defined in claim 1 wherein the passive section also includes a redun-  
2 dancy connector mounted in the rear wall of the housing for connecting the switch via a  
3 cable to a similar standby switch.

1 8. The switch defined in claim 1 and further including a cover releasably secured to  
2 the side and rear walls of the housing thereby closing the top of the housing.